

## **SOLAR SOURCE REGIONS OF LASCO CORONAL STREAMERS AND SOLAR WIND SAMPLED BY ACE AND ULYSSES NEAR SOLAR MAXIMUM**

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It is well established that streamers and the streamer belt are closely associated with the heliospheric current sheet. A previous study by Liewer et al. (JGR 2001) found that some long-lived white light streamers, which lie near the current sheet at several solar radii, mapped back to active regions at the photosphere. A recent analysis of ACE and Ulysses data by Neugebauer et al. (JRG 2002) showed that both equatorial coronal holes and open flux regions associated with active regions were sources of slow solar wind near solar maximum when polar coronal holes are small or absent. Here, we present results of an analyses of data near solar maximum to look for photospheric regions that are sources of both (1) slow solar wind as determined by mapping solar wind sampled by Ace and Ulysses and (2) streamers as determined from analysis of LASCO C3 coronagraph images. The goal is to understand the relationship between streamers and slow solar wind. The solar source region of the Ulysses-sampled wind is determined using a two-step mapping of the data to the Sun: (1) a "ballistic" mapping (constant radial velocity using the velocity measured at Ulysses) is used to map the wind from Ulysses to the solar source surface,  $R = 2.5R_{sun}$  and (2) a source surface potential magnetic field model is used to complete the mapping to the solar surface. For the coronal streamers, multiple view points provided by solar rotation are used to determine the location of the streamers at the source surface and, again, the magnetic model is used to map the field lines to the solar surface. We will report results for analysis of Carrington Rotations 1953 and 1957 when Ulysses was at about  $-30$  deg latitude. In some instances, the solar wind sampled by ACE or Ulysses maps back to the same solar source region as the LASCO streamers. For these source regions, we investigate the properties of the solar wind sampled by ACE or Ulysses. In addition, we compare the magnetic structure of the corona as seen in soft X-rays or EUV to the magnetic structure determined from the magnetic model.